

TCW/AP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Ullas Gargi et al.

Application No.: 09/904,627

Filed: July 16, 2001

For: HIERARCHICAL IMAGE FEATURE-BASED VISUALIZATION



) Group Art Unit: 2672
) Examiner: Jin Cheng Wang
) Appeal No.:
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Mail Stop APPEAL BRIEF – PATENTS

Commissioner for Patents

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Sir:

REPLY BRIEF

In the Examiner's Answer dated April 22, 2005, the Examiner has raised two new issues which form the basis of this Reply:

- (1) The Examiner has objected to Appellant's "Summary of the Claimed Subject Matter" in numbered paragraph (5) on page 3 of the Answer; and
- (2) The Examiner has supplied a new definition of the Appellants' claim phrase "refined distance metric" in the first paragraph on page 23 of the Answer.

(1) Substitute “Summary Of Claimed Subject Matter”

Please replace the “Summary of Claimed Subject Matter” under heading “V” on page 2 of Appellants’ Brief with the following:

(V) Summary of Claimed Subject Matter

A method of visualizing and retrieving a data file from a set of data files, e.g., as illustrated in Fig. 1, is disclosed. Such a method is encompassed by claim 1 and includes the Fig. 1 steps of displaying, in block 110, a plurality of images representing corresponding data files on a display device using a first distance metric between each data file (e.g., page 5, paragraph [0011], lines 20-22), redisplaying, in block 120, a portion of the images on the display device using a refined distance metric (e.g., page 6, paragraph [0011], lines 1-3), and performing, in block 140, at least one of retrieving, marking, and selecting at least one desired data file (e.g., page 6, paragraph [0011], lines 3-13).

As discussed on specification page 16, lines 6-8, as the level of redisplay increases (e.g., the number of iterative redisplay operations is increased), the percentage of data used to calculate the distance metric increases (that is, “refining the distance metric”). Appellants’ specification describes examples of how a more refined calculation is performed to redisplay a portion of the images that were initially displayed using a first distance metric between each data file (see, for example, the color histogram example of paragraph [0032]). Figs. 2A-2E illustrate a graphical representation of a display of images (Fig. 2a) using a first distance metric between each data file and an interactive selection by the user of an area 202

within the displayed images. Fig. 2B shows a redisplayed portion of the images within area 202, produced using a refined distance metric.

Claim 17 is directed to a method of interactively retrieving a data file from a set of data files in real time, e.g., as illustrated in Fig. 3. The claim 17 method encompasses the Fig. 3 steps of displaying a plurality of images in block 310, each image corresponding to a data file, on a display device using a first distance metric between each data file, interactively selecting in block 320, by a user, a portion of the images, redisplaying in block 330 the portion of the images in real time on the display device using a refined distance metric, and retrieving a desired data file in block 350 (e.g., paragraphs [0018] and [0019]).

Thus, like claim 1, claim 17 recites performing a redisplay operation on images, originally displayed based on a distance metric between each data file using a “redefined distance metric.” In addition, claim 17 recites that this occurs in real time, and that it is performed interactively by having the user actually select a portion of the images.

For the Board's convenience, a substitute copy of Appellants' original Appeal Brief as modified to include the above “Summary” is enclosed herewith.

(2) The Examiner has adopted a new definition of the claimed phrase “refined distance metric” which is inconsistent with other terms in Appellants' claims.

In the section of the Examiner's Answer entitled “Response To Argument” on pages 18-27, the Examiner has restated many of the arguments previously presented; but in addition, on page 23, has supplied a new definition of the claimed

phrase “refined distance metric” which requires other terms in Appellant’s claims to be ignored. In this portion of the Answer, the Examiner defines the phrase “refined distance metric” in the last sentence of the first paragraph on page 23 as follows:

“A refined distance metric” merely means a distance metric that refines the search process for the images or a distance metric that imposes more restrictive conditions in the redisplaying step than the distance metric used in the “displaying” step.

This definition ignores the claim 1 requirement that the “refined distance metric” be used with respect to images which have already been displayed “using a first distance metric between each data file” (see the claim 1 “displaying” step), and it ignores the use of this phrase throughout Appellants’ specification to describe calculating of a distance metric on images that have previously been displayed using a first distance metric between each data file (see, e.g., Appellants’ specification page 16, lines 6-8).

The foregoing distinction is important because the documents relied upon by the Examiner, such as the Hirata patent, do not teach or suggest a “refined” of distance used to initially display a plurality of images, but rather describe using entirely different search techniques. For example, the Hirata patent discloses using “region based image matching”, followed by “boundary based image matching”. See Column 2, lines 56-61). Results of the boundary based image matching can then be reordered using similarities among candidate images (column 2, lines 61-64 of the Hirata patent. As noted among the deficiencies highlighted in Appellants’ Brief, Hirata does not teach or suggest use of a “refined” distance metric as claimed.

Thus, Appellant’s respectfully disagree that the claim phrase “a refined distance metric” is so broad as to encompass the two steps of displaying disclosed in the Hirata patent. As such, such that all of Appellants’ claims are allowable.

Accordingly, reversal of the Examiner's Final Rejection of claims 1 and 17, along with all dependent claims, is requested.

Respectfully submitted,

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Date: June 22, 2005

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